JUDGE ROUSSY:

If there is the ability

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to communicate to employees after these sorts of decisions have been made, isn't there also the ability to communicate if -- if the NPV information was to be made public, is there anything that prevents the Company from getting out in front of that and doing what you've already done in the pleadings in this case and in your argument, emphasizing if it is the case that we the Company don't plan to retire these facilities, that our retirement decisions are based on factors other than these numbers you're about to hear about. Is that -- I guess I'm trying to get at how you couldn't cut off this potential harm that you're identifying.

MS. LINK: It's a good question, Your Honor. When we have Mr. Workman come up, he can probably add more color to this, but having done this IRP work for 12 years now, it is — the information on when a unit is going to be retired is very, very significant. These are people's jobs. It's their livelihood. For certain plants, there may not be many other jobs in those areas. These are good, well-paying jobs. To be very clear, if you

1 work at a coal-fired plant or you work at a 2 plant that emits carbon, folks are already on 3 edge. And what is the concern is that 4 information comes out, the Company says, well, 5 we haven't made that decision yet. And then 6 information changes in a year, and it goes very 7 different and the decision then gets made. 8 really does disrupt lives to have that 9 information out in the world, especially when 10 it is very negative. And the Company can only 11 make so many guarantees about -- because it is 12 a public utility, because it does this analysis 13 periodically, because it is subject to scrutiny 14 through an IRP it is a very difficult thing to 15 make promises on that. That is why the Company 16 really does shield that information and takes 17 it very seriously for the communities impacted, 18 the employees, the localities. It's big 19 sources of tax revenue and those localities 20 suffer. So that is really the heart of the 21 It is not necessarily that a supplier reason. would be in competition with the Company. 22 23 is about -- it's data, but it's not a decision. 24 And the NPVs that are related to a CPCN are a 25 They're a decision to build a unit. decision.

l	And the NPVs that are discussed in Mr. Kelly's
2	second rebuttal that you will see were a
3	decision was made from them. And so this is
4	now backup for the decision. Right now for
5	some of the units other than Chesterfield 5 and
6	6 and Yorktown 3, the decisions are not made.
7	And so it is information that really can
8	mislead and disrupt communities. And I know I
9	don't have to say anything. We are in a time
10	where jobs are so important to people. They
11	always are important, but now more than ever,
12	and our economy is more important than ever.
13	So that is the heart of the
14	argument, Your Honor. It is a data point.
15	It's not a decision. When it becomes a
16	decision, it can become public.
17	JUDGE ROUSSY: That's the heart of your
18	argument for one of your three potential harms
19	anyway?
20	MS. LINK: Yes, that is the heart of the

argument for one of the three potential harms, correct.

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So Your Honor, we do believe we've met our burden. We do believe that the motion should be denied. We have stated that we are

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1	fine with the information not being
2	extraordinarily sensitive. It can be
3	confidential. Candidly, that might be the
4	right answer anyway, though those types of
5	parties that we would be worried about like a
6	fuel supplier or maybe somebody who
7	participates in the capacity market are not
8	part of the case. The respondent deadline has
9	passed, so those entities have not entered the
10	case, so confidential would be acceptable, and
11	we can remark we can remark the Chesterfield
12	Unit 5 and 6 and Yorktown 3 information as
13	public.
14	So at this time, Your Honor, may
15	I unless you have questions for me. Let me
16	pause there, if you have any questions for me.
17	JUDGE ROUSSY: I guess I rudely
18	interrupted you. Most of the questions I
19	probably have would be better for Mr. Gaskill
20	or Mr. Workman. Let me just look through real
21	quick.
22	One more for you, since you brought
23	it up. The argument that the NPV information
24	does not link to probable costs that customers
25	will pay in the future, are you I think I

1	followed your bills are a better reflection of
2	what customers are paying rather than the NPV
3	results that are at issue. Are you the
4	Commission does use portfolios for the
5	different NPVs for the different portfolios
6	to identify incremental costs too, right?
7	MS. LINK: Absolutely. And if I said it
8	doesn't link, it's not that it doesn't link at
9	all. It's not a direct link.
10	JUDGE ROUSSY: I may have misstated what
11	you said. I apologize if I did. But those
12	those incremental NPV amounts, at least for a
13	portfolio, those those costs do factor into
14	bill increases. Again, these we're talking
15	about the projected world, obviously, not
16	today. We're talking about the IRP period.
17	But isn't it the same NPV information, at least
18	for a portfolio in a plan, that then goes into
19	calculating a projected retail rate impact?
20	MS. LINK: It is. It's sort of a
21	different view, yes. All the portfolios have
22	net present value amounts. And you can see
23	which are more extensive than others and how
24	they relate to a least cost plan, and you get

an order of magnitude, which are more expensive

than others. What we're required to do in this case is provide bill impacts for the plans.

And that is a new thing. It happened for the first time for one of the plants last year for the 2018 case. Now we've provided bill impacts for -- like it's all plants, they have bill impacts that's been created, which goes down to base rate assumptions, as well as rider assumptions. I think it's a 10-year analysis.

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So in terms of what customers can understand in terms of bill impacts, they have that information. But yes, the comparable NPVs of the different portfolios also give you an order of magnitude about which plans are more expensive than others, and they're valuable. And this information is valuable without a doubt, and it does -- it does indicate a customer benefit or a customer hurt. My only point was that if the point is to show the world what will happen with actual rates, bill impact is a better way to show that, and that information is in the record for things that rate decisions have been made or things are required to be billed based on the statutes or commitments the Company is making.

1	JUDGE ROUSSY: Okay. Thank you. I
2	think that's all the questions I have for you.
3	Did you have a preference on
4	calling Mr. Gaskill or Mr. Workman first?
5	MS. LINK: May I call Mr. Workman first?
6	JUDGE ROUSSY: Sure, whichever way you
7	want to do it.
8	MS. LINK: Mr. Workman, may we call you
9	to the screen.
10	GREG WORKMAN, first being duly
11	sworn, testified as follows:
12	DIRECT EXAMINATION
13	BY MS. LINK:
14	Q. Can you please state your name, your
15	title, and your business address?
16	A. Yeah, my name is Greg Workman. I'm
17	the director of field management. I work at 600
18	Canal Place, Richmond, Virginia, 23219.
19	Q. Thank you. Mr. Workman, we just
20	needed a little information from you. Can you
21	give us some detail about the types of supply
22	agreement that the Company enters into at these
23	particular units we're talking about?
24	A. Yeah, I sure can. So we're talking

about a multitude of products here, if we want to

2	just focus on a plant like < THIS PORTION CONTAINS CONFIDENTIAL CONTENT AND HAS BEEN FILED SEPARATELY UNDER SEAL> We work on behalf of our customers to give a competitive
3	portfolio, a reliable portfolio. And the types of
4	products we're dealing with are contrary to
5	what Mr. Norwood said, they generally are not
6	based around indexes. You can go out and see
7	public pricing types of information. They may
8	trend with those types of indexes, but these
9	are these are products that are negotiated.
10	These are nonstandard products; in other words,
11	you can't go into a market and sort of hit a
12	button and buy your product. So you're
13	negotiating. Sometimes you're negotiating for
14	years with some of our suppliers. Those
15	negotiations are based around relationships,
16	long-term relationships, which is very important.
17	There is lots of back and forth. There are
18	generally I would describe them as smaller
19	suppliers. These are not high net worth
20	companies. These are not companies with strong
21	balance sheets. To use the wood products, for
22	example, these may be I often describe them as
23	guys who are working out of their garage. They've
24	got a few trucks, they've got a wood chipper, and
25	they've got, you know, a couple of

1	brother-in-laws, for example, who may know a
2	little bit about what's going on in the state and
3	hear things about the IRPs and net present values
4	and can grab some information. But generally
5	again, smaller companies, smaller balance sheets.
6	They tend to think one- to three-year blocks.
7	They make investments with the understanding that
8	they're dealing with a creditworthy counterparty
9	such as ourselves, a reliable counterparty.
10	The types of products we're dealing
11	with: Limestone, biomass, ammonia, coal, those
12	would be and limestone would be sort of key
13	products. The forms of transportation, which is
14	important here, there's a lot of trucking that
15	happens in the Virginia City market, for example.
16	So there's a lot of trucking relationships. There
17	is a lot of relationships with people who store
18	our products and handle our products, sample our
19	products.
20	Hopefully I addressed your question
21	there.
22	Q. Yes, you did. Can you also give us
23	an indication about the terms? I believe we heard
21	Mr. Norwood say he doesn't expect there

necessarily to be any kind of long-term agreement,

especially if these units are at risk. Can you give us a sense of -- you talked about a number of different commodities. Can you give us a sense of the kind of terms that you negotiate for the particular commodities?

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A. So there's a lot of different commodities or products that I just highlighted to you. It's going to vary. You know, I would think a five-year deal maybe is long term. I think they're generally going to be in the one- to two-year time frame. That's driven primarily from us. We prefer to keep it short term when we're in a pretty volatile market. Our desire right now is to stay short term. You know, instead of those negotiations, the contract terms may depend on this particular supplier's relationship with a bank, for example.

So let me cite you an example. So we'll have a small supplier who is thinking about investing maybe \$300,000 in a wood chipper. And he comes to us and says, hey, I've got -- I want to get into this business, supply you product. I've got to go pay \$300,000 for a wood chipper. And we'll say, well, what are you looking for? What are your terms? What did the bank say? And

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so that will ensue, and negotiations will go back and forth. Maybe in an instance like that, you know, if we think this is a creditworthy and a good counterparty, maybe we will think longer than a couple of years. Just as a rule of thumb, I would say one to two years is a good length, is an average across those five or six products I described.

- Q. Can you give the hearing examiner some indication of if some of these suppliers and you described them sort of smaller, not high net worth suppliers were to gain wind from the Company's information that a unit was at risk or in trouble, what might happen to your supply chain?
- A. Yeah, so there's several ways we could see that playing out if this information were ever to be in the public. First of all for the active negotiations we've got going on -- and again, we're trying to build a competitive portfolio, diverse and deep portfolios. Those active negotiations that may be going on for a year, immediately those negotiations come to a stop. And those suppliers are going to say, well, wait a second, I just got some information from

Joe down the street who said look here about you guys are losing all this money, and maybe you're making all this money. So, you know, our active negotiations and how we're trying to lower costs, all those negotiations would be stopped and potentially not -- we wouldn't commence those again.

If there were signals out there
that -- again, most of these suppliers we're going
to deal with are not -- they're not sophisticated.
In my over a dozen years in dealing with these
types of products, I have never had a supplier
come to me and said, hey, I saw this FERC Form 1,
and I saw in your IRP hearings, and this data
point. Nobody is capable of putting that
information together, first of all. So they're
going to get it word of mouth. By word of mouth
they're going to find out information from people
who probably don't know much about it. And we're
talking about dealing in small communities, and
there you go. You've got this negative messaging
started.

So it's going to manifest in a couple of ways. <-- THIS PORTION CONTAINS CONFIDENTIAL CONTENT AND HAS BEEN FILED SEPARATELY UNDER SEAL. -->

have this big negative NPV, and he's going to come to us and say, you know, I'm not investing in any future timber tracts. I'm not investing in any future wood chippers, or I'm not going to invest in bringing a second crew on or buying that next product. So that's the signal -- you know, just using a volume of suppliers as an example -- that he's going to pick up from that -- from that NPV analysis.

making a lot of money, you know, again, these are not long-term contracts. Our contracts are rolling off at all different times. They're going to see this huge NPV and say, whoa, you're making all kinds of money. Again, it's an uneducated ill-informed opinion that he has, but that's the sole information source that he's going to have. And he's going to say, Guess what's happening when we renegotiate next month? I'm going to raise my rates 10 percent. I'm going to raise my rates 20 percent. So those are very real scenarios. That can happen across all of our products. I sort of picked on the biomass suppliers.

The other thing is, again, being able to build a diverse large portfolio of suppliers

that that spreads risk. That promotes

competition. When you start losing suppliers who

may look at this information and say, I'm out of

here, I can't make that decision to invest any

more time and energy on the Dominion business, now

all of a sudden we have fewer suppliers. And

that's an unending cycle that you're going to

start. That's a spiral downward that you're going

to start wherein now you have fewer suppliers,

prices go up, fewer suppliers again, prices go up,

etc.

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So that's -- that in our view is a lose-lose proposition for our customers, and we simply think there's nothing good that comes out of our suppliers having this information that can only be used against us in negative ways.

- Q. Thank you, Mr. Workman. Is there anything else you would like the hearing examiner to know on this topic?
- A. Yeah, I just want folks to know that everything goes through the fuel expense. So these are one-for-one expenditures and these are large expenditures. You take a plant like Virginia City, it is a major component of their total operating -- and I believe Mr. Norwood

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referred to it as your variable operating costs.
These fuel costs far exceed for typical
maintenance programs at the stations, salaries,
etc. So every little thing we can do to keep
rates low is really important for these stations.
MS. LINK: Thank you, Mr. Workman. I
have no other direct questions for Mr. Workman.
He's available for your questions and cross.
JUDGE ROUSSY: I think most of my
questions have to do with the capacity market
and fuel prices for biomass that may be better
for your next witness, or would Mr. Workman be
able to answer questions? I know he knows
about the biomass fuel contracts, it sounded
like, but what about natural gas?
MS. LINK: Fueling of natural gas?
JUDGE ROUSSY: Yes.
MS. LINK: Mr. Workman, is that your
area of expertise?
THE WITNESS: Yes, it is.
JUDGE ROUSSY: Okay. Great. Well, then
I do have a couple for you on that issue too.
There was testimony by Mr. Norwood
that most of the natural gas prices are for
fuel supply for power plants are indexed; is

that consistent with your understanding of fuel pricing?

THE WITNESS: Yes, that is. And I would say certainly greater than 50 percent, but not 100 percent. But I understand about this particular proceeding we're not -- you know, the stations that I think were involved in this particular issue, there is no natural gas involved here.

JUDGE ROUSSY: Yeah, I think the numbers are for the fossil plant. So it does include some natural gas facilities certainly.

Let me ask you about the biomass facilities. In the pleadings it looks like the General Assembly has directed that those particular units, other than those that are co-fired with coal, which I think is code for VCHEC, that those retire on or around 2028; is that the case?

THE WITNESS: That is my understanding.

JUDGE ROUSSY: Okay. So the window of

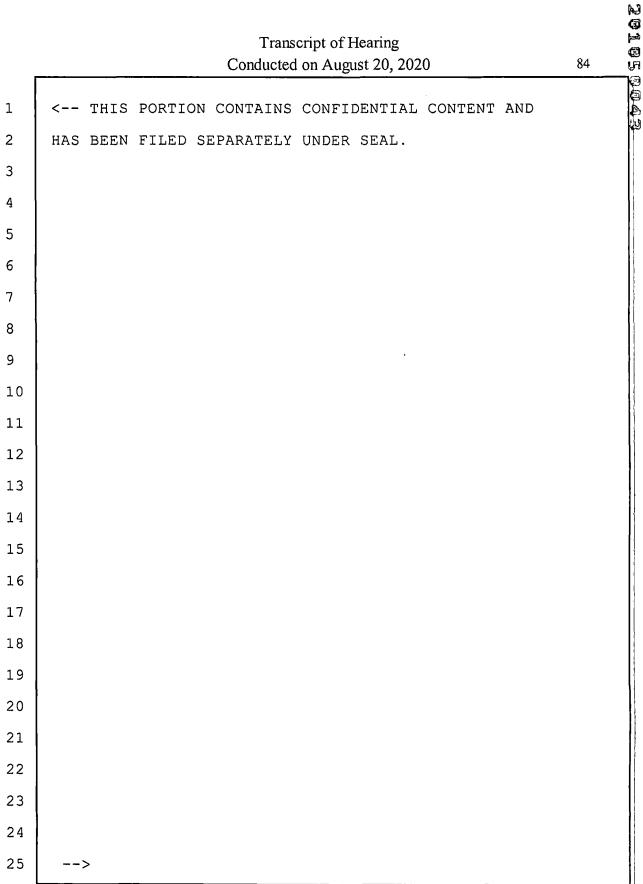
time we're looking at -- at least under the

current law for those plants -- is eight years.

So there is already a signal out there that's

been sent that is communicating the sort of

1	issue that it sounds like you're concerned
2	about from a contracting standpoint, maybe from
3	an employment standpoint as well; is that
4	accurate?
5	THE WITNESS: That is accurate.
6	JUDGE ROUSSY: So we're talking about
7	whether at least under the current law
8	whether retirement might happen in 2028 or in
9	the eight years before then, basically?
10	THE WITNESS: Correct.
11	JUDGE ROUSSY: < THIS PORTION CONTAINS
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1	questions for Mr. Workman?	
2	MS. MACKO: I think just a few, maybe	
3	one. Can you hear me okay?	
4	THE WITNESS: I can, yes.	
5	CROSS-EXAMINATION	
6	BY MS. MACKO:	
7	Q. So with the Virginia City Hybrid	
8	Energy Center, looking at the capacity factor	
9	that's provided publicly in Appendix 5-D, it shows	
10	in 2017 the 62.4 percent capacity factor; in 2018	
11	it was 55.4; in 2019 it was 22.4 22.2. And	
12	those were all actuals. But then in 2020 it's	
13	projected to drop 5.7 percent. Doesn't that mean	
14	there is a whole lot less coal you need to obtain	
15	for 2020?	
16	A. If those projections were to come to	
17	fruition and be real, yes, absolutely.	
18	Q. Doesn't that send a signal to the	
19	market as well?	
20	A. That does, and that could actually be	
21	a helpful signal. We use that signal in our	
22	negotiations and say, hey, if you guys want to run	
23	above a 20 or 30 percent capacity factor, we need	
24	lower prices. It's different than this NPV. You	
25	know, you've got a plant that's deeply you	

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1	know, that's not going to make it.	∂ ⊕ 47 €
2	Q. Well, wouldn't a negative NPV also be	
3	a bargaining tool for the Company to obtain lower	
4	prices potentially?	
5	A. It could be.	
6	MS. MACKO: Thank you. That's all I	
7	have, your Honor.	
8	JUDGE ROUSSY: All right. Mr. Browder?	
9	MR. BROWDER: Yes, Your Honor, just a	
10	few questions.	
11	CROSS-EXAMINATION	
12	BY MR. BROWDER:	
13	Q. Good afternoon, Mr. workman.	
14	A. Good afternoon.	
15	Q. Mr. Workman, I understood you to say,	
16	or I heard you say with respect to the biomass	
17	suppliers that these are unsophisticated	
18	mom-and-pop type operations, right?	
19	A. Correct.	
20	Q. And they're guys that are, quote,	
21	working out of the back of their trucks?	
22	A. That's a description, yes. Maybe I	
23	pushed it a little bit far on the description, but	
24	they are not large corporations. They are not	
25	they don't have office buildings, etc.	

1	Q. Right. And Dominion is a large
2	corporation, right?
3	A. Yes.
4	Q. It hires lots of sophisticated people
5	such as yourself and others involved in all lines
6	of its business, but certainly in fuel
7	procurement, right?
8	A. Correct.
9	Q. And it's your testimony that
10	Dominion you know, Fortune 100 companies can
11	somehow be taken advantage of by these
12	unsophisticated guys working out of the back of
13	their truck; that's your testimony, right?
14	A. Well, my testimony was that these
15	folks make incremental decisions to either
16	continue participating with us or not
17	participating. And those decisions they make will
18	sort of change the landscape the competitive
19	landscape that we are left to deal with. We will
20	not have as good an ability to create a diverse
21	and wide portfolio of suppliers. If we begin to
22	lose a lot of suppliers, we're going to have a lot
23	of consolidation, and we're going to deal with
24	players who have more consolidated power.

And Mr. Workman, you also indicated

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Q.

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1	that the these contracts are relatively
2	short-term contracts, right?
3	A. They can be. They can swing from
4	every six months to two years, I believe I said.
5	Q. Up to two years?
6	A. Yeah.
7	Q. So they wouldn't be, say, for
8	example, 10-year contracts?
9	A. That's correct.
10	MR. BROWDER: That's all I have,
11	Mr. Workman. Thank you.
12	JUDGE ROUSSY: All right. Any redirect?
13	MS. LINK: No redirect, Your Honor.
14	JUDGE ROUSSY: Thank you for your
15	testimony, Mr. Workman. You may be excused.
16	THE WITNESS: Thank you.
17	MS. LINK: The Company calls Scott
18	Gaskill.
19	SCOTT GASKILL, first being duly
20	sworn, testified as follows:
21	DIRECT EXAMINATION
22	BY MS. LINK:
23	Q. Can you please state your name, your
24	title, and your business address?
25	A. My name is Scott Gaskill. I'm the

- director of power generation, regulated operations. My address is 600 East Canal Street, Richmond, Virginia, 23219.
- Q. Mr. Gaskill, have you been listening to the proceeding here today?
 - A. Yes, I have.

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- Q. I'd like to ask you about the FRR. You're familiar with that concept, correct?
 - A. Yes, I am.
- Q. And the hearing examiner was asking a question of Consumer Counsel, and was asking essentially whether by going FRR, would that make the Company more reliant on obtaining capacity by contract. Do you have an opinion on that matter?
- A. I do. And yeah, so under FRR, not to get too far in the weeds on this, obviously that's when you pull both your load and your generation out of the capacity market, and you self-supply.

 And one of the I'd say restrictions of FRR is that you cannot be short of your load obligation. So you must have the capacity in your portfolio, whether you own it or contract for it, to meet your load obligation. And if you are short, there are very high penalties. It would be two or three times what the market clearing price would be. So

the bottom line is you can't be short.

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And that FRR plan has to be filed one month prior to when the RPM, the base capacity auction takes place. So even though you're not going to be participating, you have to file your FRR plan prior to that auction, which obviously means prior to when the market has price discovery on what the value of capacity is for that delivery.

So in the situation where you're short capacity, what you've got to do is prior to that auction you're going out and procuring your bilateral capacity contracts. And they have to be unit-specific, you know, transactions. So you've got to go out and find a counterparty that's willing to sell you that capacity to include in your FRR portfolio prior to the auction taking place.

So it is, you know, a less transparent market. You're doing a lot of one-on-one negotiations to try to procure that capacity. And the counterparty knows -- I mean, they know if you are in a short position and they know you are in a long-short position for anything, and they know if you don't get that

capacity you're going to be facing penalties. So they know you've got to get that capacity. So what you really want to be careful of is not disclosing exactly the economics of your own units, exactly where your long-short position is going to be prior to procuring those bilateral contracts.

- Q. And when you talk about counterparts, are they more sophisticated counterparts in your opinion?
- A. They are. They would be merchant generators, perhaps other utilities. Yeah, it would be anybody in PJM that owns generation.
- Q. I understand the Company has not yet made a decision on going FRR, correct?
 - A. That is correct.

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- Q. And just for a time frame for the hearing examiner, when could it possibly be a consideration made? And you can give a very broad time frame. It's obviously not a commitment.
- A. Yeah, so the first capacity delivery year that we -- you know, that really comes into play for the '22, '23 capacity delivery years, so starting June 1, 2022, that's the next auction to take place because the prior auctions have already

cleared. Based on PJM's compliance filings in the MOPR proceeding, that auction should take place sometime around the first quarter of 2021. And we would have to file our FRR plan one month prior to that auction, whenever that occurs. So looking at probably we'd be making that decision I'm going to estimate early 2021 is when we need to make that decision by.

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- Q. So then turning to -- actually, let me just ask one more question. When you're talking about bilateral contracts that you might have to enter into if you go FRR, do you expect that that is more bilateral agreements than you are entering into now?
- A. It would be, yeah. Pretty much all of the capacity that we procure is through the RPM auction. That's where you're buying and selling your capacity for generation for your load. So while we have certainly PPAs that they come capacity with it, we're also bidding that capacity into the market for the most part. So really all our load capacity is being procured from the RPM. So we don't really have any bilaterals of the same kind of nature of what I'm talking about.
 - Q. Let's just turn to another topic

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- briefly. You saw discussion of the FERC Form 1 that was introduced as Exhibit 1?
 - A. I did, yes.

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- Q. And you saw that that is for the calendar year of 2019, correct?
 - A. I did, yes.
- Q. And was there a major overhaul in 2019 for VCHEC?
- There was about a 70-day Α. There was. outage, which is, you know, much longer than a normal just routine outage that you would take. And that did include a major turbine overhaul, a lot of boiler work, some scrubber work. It was kind of what I call a one-time thing, but it's certainly something that doesn't happen every year or really within a sort of, you know, frequency. It's probably a once every six- to ten-year type maintenance. So if you were going to look at a FERC Form 1 and look at actual costs for that unit and that year and try to draw any conclusions and say this is a really expensive unit, you know, that you couldn't do that from that one year because it was really an anomalous year.
 - Q. What's missing -- and I know
 Mr. Norwood kind of made it seem very easy to take

the Form 1, take several years of it, go take the IRP, take these appendices, and you could come up with the NPVs. But just for the record since you're the subject matter expert, what's missing from the Form 1 that does get included in this NPV analysis?

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Α. Yeah, so it's things like obviously energy revenue, energy markets going forward. It's capacity revenue going forward, or if you're in an FRR situation your estimate of a weighted capacity expense bilaterals. There is ancillary revenue that's not in there. For the biomass in Virginia City, there is the renewable energy certificate, the REC revenue that we get from selling. There is the production tax credits on the biomass plant. So there's any number of factors that you're not seeing the complete picture when you're just looking at the FERC Form That's just looking at the fixed cost of the unit, the fuel cost of the unit, but it's just one side of the equation; and like I've already said, it's just one year of cost, which in any power plant you're going to have -- from year to year that's going to vary just based on your outages, your run time, that sort of thing. And it also

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doesn't project -- there was some mention of declining capacity factors going forward. You know, as capacity factors decline, so do your costs. So you have less -- your maintenance interval is spread out. It's all sort of -- you kind of have to look at the whole picture to draw -- to draw a conclusion. And that's what the NPV analysis -- that's why we have an IRP. That's why we do the modeling that we do.

- And turning to the last topic, the hearing examiner asked me a question about what harm is it to put out the NPV information, and then maybe follow it up with the employees at the plant, explain to him what it means, explain to him what it doesn't mean. I know you've been around the Company for quite some time. Can you just give -- from the Company's perspective, can you give the hearing examiner the Company's perspective on how sensitive the unit retirement information is?
- A. Yeah, I mean, I think I'll repeat a lot of what you said. I think you said it well when you responded a little earlier. But yeah, I mean, the employees at the station, if you work at a coal power station, you understand the trend in

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They see the capacity factors. the market. know their livelihood is on the line here over the next several years. And so they do -- and every word that comes out, every report, every news article they see, they are hanging on every word. And so when an economic analysis -- and say hey, here's the NPV, the Company's NPV is out there, we can go and tell them -- and we have -- hey, this 9 is not a commitment to retire. They understand. 10 They see numbers. And that's different than a 11 company coming and telling them, right? So they 12 do just live on every word, every news article, 13 everything that comes out. They're real people, 14 real lives, real families. And it is disruptive 15 when this type of stuff comes out.

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MS. LINK: Thank you. Your Honor, that concludes my questions for Mr. Gaskill on direct. He's open for cross and your questions.

JUDGE ROUSSY: I do have some questions. Let's start with looking at one of the two Either one is fine, but how about the one that says Exhibit B, page 4 of 11 in the top right-hand corner, if you have that, Mr. Gaskill.

THE WITNESS: I do, yes.

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JUDGE ROUSSY: How do I use this to figure out what year a power plant might retire?

THE WITNESS: So I don't know that you could, because it is a 10-year NPV analysis. So you're not going to know specifically what year. But what I would tell you is -- and we do this all the time -- like prior to an auction, prior to a capacity auction, you know, we will go out. I mean, we're looking at news articles. We're looking at filings. We're looking at deactivation requests and we're trying to come up with what do we believe the changes from the prior auction, what units are retiring, what units are getting built. that's how we form review or at least one thing that informs review on what the future capacity price is going to be. So if I start seeing -and that's even over time. So if I start seeing units that are either, you know, very positive, then I can pretty much count on that unit being -- okay, a rational person is going to keep that in the market. If I see -- start seeing units that are very negative I'm going

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to start thinking sooner or later that unit may be exiting the market. And I can start drawing conclusions on the overall supply and demand of the market, and then that informs our price view of the capacity market.

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So you're right, I wouldn't know for any specific unit exactly when that unit is going to be retired, but it can start informing my view on behavior and overall supply and demand of the market.

JUDGE ROUSSY: When the Company has a capacity need or an energy need, whether it's -- well, I'll leave it at that. If there is a need from the Company, doesn't the Company already use RFP processes to try to procure additional energy and/or capacity right now?

THE WITNESS: For long-term contracts when we're going to go out -- PPAs, that sort of thing, I don't know that we've done that. Can't think of -- like I was saying in an FRR-type situation where you're looking at -- you know, trying to fill that one-year gap, because you're looking at one year at a time. So I don't think we've done RFPs for something like that. We do that routinely for, say, new

solar facilities, new PPAs that are looking more for long-term resources.

JUDGE ROUSSY: So when you said earlier that you don't have any bilaterals of the nature that you're talking about, you were referring to a shorter term bilateral design to fill a need associated with a capacity shortage for an FRR plan?

THE WITNESS: That's right. That's right. And when you're in the traditional capacity market, there is really no need for that, right, because effectively the market is one big RFP, right? You have a very liquid transparent market in that case.

JUDGE ROUSSY: Is there any reason -- is there anything about a shorter term contract that you're looking for that doesn't lend itself to the type of RFPs that the Company already does where the Company says, We'd like to solicit up to X amount of new generation, and we'd like it to be in service by a date that's two or three years in the future? Is there something different about a shorter term contract that doesn't allow you to do that same sort of an RFP?

THE WITNESS: Possibly could do that
under -- you would have some time constraints
with your -- by the time you elect FRR and
having to fill that position. It could be
possible, yeah. You wouldn't be necessarily
looking for a new unit. You'd be looking for a
transaction -- you know, a unit that's already
out there willing to sell you their capacity
for one delivery or three years -- three years
from now. So it's possible.

JUDGE ROUSSY: All right. I think

JUDGE ROUSSY: All right. I think that's all the questions I have. Thank you, Mr. Gaskill.

We do have some folks who might want to ask you cross-examination questions, though. Ms. Macko?

MS. MACKO: Yes, thank you.

CROSS-EXAMINATION

BY MS. MACKO:

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- Q. I'm referring again to the same page Hearing Examiner Roussy was. I believe it's the 10-year NPV results that has the larger number of units on the left hand; is that right?
- A. Yes.
 - Q. Okay. So this provides a one-page

1	summary with a ten-year NPV for individual
2	generation units, correct?
3	A. Correct.
4	Q. It does not provide or reveal the
5	annual NPV results for individual generation
6	units, correct?
7	A. You mean like the annual numbers that
8	go into the NPV results?
9	Q. Right. It's a 10-year number, not a
10	two-year, three-year, four-year number?
11	A. That's right. It's a 10-year number,
12	yes.
13	Q. And it's possible within those 10
14	years a unit could have a positive NPV one year
15	and a negative NPV in another year, correct?
16	A. Yes.
17	Q. Could it be possible that a unit has
18	a positive NPV in the early years, but it turns
19	negative in the later years?
20	A. That is possible, yes.
21	Q. And the PJM capacity market is a
22	forward market that typically clears three years
23	ahead, correct?
24	A. Typically, yes.
25	Q. I know we are in uncharted territory

at this point.

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And FRR, would that work the same way, it would be three years ahead?

- A. It would be.
- Q. And when you bid a unit in currently, you bid it in one year at a time, correct? I'm sorry, I just asked you that.

You bid it in one unit at a time; is that correct?

- A. Correct.
- Q. Okay. Thank you. And do you rely on the 10-year NPV results on page 3 when you make those bids?
 - A. In some cases they do. I'll give you an example. When we were looking at the ten units in the coal reserve and we were again making trying to make the decision for at that time it was the '21-'22 auction and how to bid those units in. So in that case you are looking at, at what capacity price do I need the market to clear to keep these units operational or to bring them out of coal reserves? So in that case you're not going to bring them out and incur the expense of, you know, rehiring, restaffing, all that for one year. So you are looking at what is sort of the

sustained capacity value that I'm going to need to bring those out. So you are looking at least to inform your bids longer than necessarily just a one-year cost.

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So I wouldn't say you strictly use -I'm just going to take this 10-year NPV number and
use that, but the analysis that's behind it does
inform the bid in that type of a situation.

- Q. Are you saying that someone could derive the Company's precise bid into PJM by looking at these unit-specific --
- A. Could not direct the exact bid price.

 They could begin -- you could look at something

 like this and you could take a view on whether you

 think that unit is going to clear or not.

JUDGE ROUSSY: How can they? Can't Dominion bid any of these units in at zero, if they want?

THE WITNESS: You could, yes. And for many units, we do. Like the example I was giving where you're -- like a unit on the bubble there, that's where you would not always bid in as a price taker. You're going to bid it in at some -- like this is what the capacity price I need to clear to keep this unit

1 So it's those on the bubble units operational. 2 where you're often not bidding as a price 3 taker. 4 JUDGE ROUSSY: But from a -- someone who 5 is not Dominion who is playing in the capacity 6 market, doesn't your ability to bid zero really 7 throw a monkey wrench in the ability to 8 understand what units -- well, to translate the 9 economics of the units into a bidding strategy? 10 THE WITNESS: It could, but generally, 11 again, like I was saying, we do this type of 12 analysis, market analysis trying to figure out 13 supply and demand. When we look at units that 14 we -- units that we own and we see marginal 1.5 units, we -- you can make a pretty good 16 assumption that those types of units, 17 particularly on the merchant side, they're 18 probably not bidding in at zero. 19 JUDGE ROUSSY: Not cost-of-service units? 20 21 THE WITNESS: Right. Correct. 22 JUDGE ROUSSY: That seems to be an 23

important distinction -- well, I'll ask you:

Isn't that an important distinction when you're

trying to -- someone is in the market and they

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look at these numbers, the fact that you could bid a Virginia City in at zero, I mean, doesn't that -- someone who is sophisticated in looking at this might very well assume that that's what Dominion is going to do.

THE WITNESS: Yeah, and I don't think
the sensitivity here is necessarily anybody
trying to ascertain what our precise bid price
is for any individual unit. It's more of, you
know, what do they project our long-short
position is going to be over time? What units
are going to clear, not going to clear? Is a
unit in jeopardy of retiring over time? That's
the sensitivity there, I think, rather than an
individual bid price while we are in the
traditional capacity price market.

JUDGE ROUSSY: Sorry to interrupt, Ms. Macko.

MS. MACKO: No. Thank you.

BY MS. MACKO:

- Q. I think I just have one more,
 Mr. Gaskill. If another NPV analysis is done in
 another year from now, would you expect the
 results to change?
 - A. Yeah, I mean, certainly you're going

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1	to get a different number, you know, unless market
2	fundamentals market fundamentals change
3	drastically directionally, they would be you
4	would expect them to be the same.
5	MS. MACKO: Thank you. That's all I
6	have.
7	JUDGE ROUSSY: All right. Mr. Browder?
8	MR. BROWDER: Yes, Your Honor.
9	CROSS-EXAMINATION
10	BY MR. BROWDER:
11	Q. Good afternoon, Mr. Gaskill.
12	A. Good afternoon.
13	Q. A couple of questions for you. You
14	stated when you were talking about the FERC
15	Form 1 that Mr. Norwood discussed, you noted that
16	there is there is information relevant
17	information that's not included in the FERC Form
18	1, correct?
19	A. I did, yes.
20	Q. And that could be things like
21	production tax credits, ancillary services
22	revenues, things like that?
23	A. Yes.
24	Q. Now, those things would be
25	considered, would they not, in capacity factors

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1 determining capacity factors; is that correct? 2 Some of those items could be. And I'd like to refer to -- this 3 0. 4 docket has been referred to earlier in the 5 proceeding, this Appendix 5-D. And that's the 6 schedule -- schedule in the IRP plan that shows 7 three years of actual and a number of years of 8 projected capacity factors. Looking at -- we've 9 talked at lot about Virginia City Hybrid Energy 1.0 Center, and there we show -- in case you don't 11 have it in front of you -- actuals in 2017 were 12 62.4 and --13 Α. What was the appendix number again? 14 I'm sorry. 15 Yes, appendix 5-D, D as in dog. Ο. 16 Okay. I'm there. Α. 17 Ο. Okay. So you can see just running across starting in 2017, 62.4, 55.4, 22.2., the 18 last of the actuals because that's 2019. I'm not 19 20 going to read them all here, but starting in 21 2020 -- capacity factors from Appendix 5-D. 22 (Off-the-record discussion). 23 BY MR. BROWDER: 24 I was just ticking off some of these 25 capacity centers at Virginia City Hybrid Energy

1	Center on this Appendix 5-D with 62.4 in 2017,
2	55.4, 2018; 22.2, 2019. Then picking up with
3	projected factors, 5.7, 6.8, 7.4, 7.4. I won't
4	read any additional ones.
5	The question, Mr. Gaskill, is: Why
6	are these capacity factors so low after the 2019
7	actual? Why are they projected to be so low?
8	A. So I would have to I don't do the
9	IRP modeling. So I don't know exactly what came
10	out of the model I mean, not exactly what came
11	out of the model, but what's driving that. I
12	would assume it's largely just the declining
13	energy prices by the PJM energy prices over time
14	that are driving the lower capacity factors as a
15	general matter.
16	Q. Thank you. And you mentioned that
17	again, I think this was in response to the
18	discussions about FERC Form 1, and you mentioned
19	that there had been a significant capital
20	investment at the VCHEC center in 2019; is that
21	right?
22	A. There was a major yeah, major
23	maintenance that occurred in the fall of 2019.

How much money was spent on

Fall of 2019.

Okay.

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Q.

1	that project?	
2	A. I don't know.	•
3	Q. You said it was major?	
4	A. Yeah, I mean, they were basically	
5	I don't want to say ripped the turbine part	
6	pulled the turbine and generator apart, did	
7	maintenance, put it all back together. You know,	
8	it was a major overhaul. I don't know what the	
9	precise dollars were for the outage, but my point	
10	is it was something that that type of an outage,	
11	that type of maintenance work doesn't happen every	
12	year. It's a fairly infrequent anomaly type	
13	thing.	
14	Q. If I may just ask, do you think it	
15	was tens of millions, a hundred million?	
16	MS. LINK: Your Honor, I believe it's	
17	already been asked.	
18	THE WITNESS: I have no idea. I really	
19	don't.	
20	BY MR. BROWDER:	
21	Q. The Company made a major capital	
22	investment in Virginia Hybrid Energy Center fourth	
23	quarter for the fall of 2019, that's your	
24	testimony?	
25	A. My testimony is we had a major	

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1 I don't know in terms of capital dollars outage. 2 spent. 3 MR. BROWDER: Okay. Mr. Gaskill, that's 4 all I have. Thank you. 5 THE WITNESS: Thank you. 6 MS. LINK: No redirect, Your Honor. 7 JUDGE ROUSSY: All right. We still have 8 Staff and then reply. Let's take a 15-minute 9 break and reconvene at 4:45. Mr. Gaskill, you 10 are excused? 11 (Whereupon, a recess was taken). 12 JUDGE ROUSSY: It's 4:45. Ms. Macko, 13 the floor is yours. 14 MS. MACKO: So again, I'm Ashley Macko 15 representing the Commission Staff today. 16 Consumer Counsel's motion seeks to make public 17 the high-level unit-specific results of the 18 Company's retirement analysis. In that 19 analysis the Company looked at the expected 20 economic impact on customers of continued 21 operations of individual generating units over

the next 10 years. Importantly, only 10-year

annual NPV. To resolve the motion, the hearing

NPV results are sought to make public, not

examiner must determine whether the harm of

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disclosure outweighs the presumption in favor of public disclosure. Notably, the hearing examiner does not have to find the absence of harm; rather, it's a balancing test.

It is Staff's position that in this instance the presumption in favor of public disclosure outweighs the potential harm. This information is not dissimilar from information already publicly disclosed in the IRP. Stated simply, with all the information that is already in the public domain, there is little to be gained from knowing the 10-year NPV results from the individual units that cannot already be discerned from other public information.

Taking the Company's claimed harms in term, I'll start with the fuel supply negotiations. The Company states that if fuel suppliers saw a high positive NPV per unit, they might demand higher prices for fuel. And I believe Your Honor is also concerned about extracting higher prices for goods and services more generally. We have not heard a lot of concrete examples of this today, other than wood fuel for the biomass units. The IRP

1 already publicly discloses the annual expected 2 capacity factors by individual generation unit. 3 That's appendix 5-D. A change in capacity 4 factor will translate into a change in fuel 5 consumption. Mr. Workman acknowledged that. 6 Moreover, a unit's capacity factor reflects how 7 often it is modeled to economically dispatch 8 into the PJM energy market. Units with high 9 NPV results will show correspondingly high 10 capacity factors and vice versa.

I know counsel for the Company indicated her view that a low capacity factor does not necessarily indicate a unit is likely to retire, and citing to PG units like combustion turbines as an example of that, but where a unit is a base load or intermediate unit and has an extremely low capacity factor, the market is on notice that the unit is in jeopardy. Mr. Abbott can discuss that further.

The IRP also already publicly discloses the Company's fuel price forecast, including coal, natural gas and oil. That's in Appendix 4-O. The Company's IRP also publicly discloses heat rates by individual unit.

That's Appendix 5-E.

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	The company also algues that if
	fuel suppliers saw an NPV that was highly
	negative, they might see buyers for fuel in
	anticipation of retirement, and that's at page
	5 of their response. Yet the Company is
	already publicly disclosing the units that it
	plans to retire and the years in which it plans
	to retire them. That's in Appendix 5-J. For
	retiring units, there is no additional harm in
i	this disclosure of NPV information since the
	planned retirement and retirement dates are
	disclosed. For units without set retirement
	dates, the IRP does include publicly the
	projected capacity factor in every year for
	every unit. From this, fuel suppliers will be
	able to discern a likely increase or decrease
	in the amount of fuel that will be consumed by
	a unit.
	Moving next to capacity markets,

Moving next to capacity markets,
the Company states that publicly disclosing the
NPV information could inform the market of the
Company's potential bidding strategy for
various unit, and whether they are likely to
clear the capacity market or not. Again, the
IRP already discloses potential unit

retirements that would no longer be bid into the capacity market. So the market has that information. The market also already knows the units the Company plans to continue operating and the annual expected capacity factors, which is indicative of the economics of the unit.

Importantly, the IRP also discloses publicly the Company's forecasted PJM capacity prices over the next 15 years in Appendix 4-0.

With all this information already public, there is little or no competitive advantage to knowing the 10-year NPV results of the individual units that cannot already be known with this other public information.

In addition, the PJM capacity market is a forward market that typically clear three years ahead. The NPV results sought to be made public, on the other hand, are based on a 10-year period and do not contain annual NPV results.

The last harm the Company identified in its response to the motion is a, quote, "risk of sending the wrong message to the communities and employees where a specific unit is located," end quote. This is not a

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market-based harm, but something akin to public The Company states that, quote, "requiring the public disclosure of the unit-specific NPV information, particularly negative NPV, without context may lead employee, local governments, businesses and suppliers to assume the Company will retire specific units," end quote. Respectfully, this potential harm is not an appropriate basis for 10 a confidentiality designation, and does not 11 outweigh the presumption in favor of public 12 disclosure. The Commission has previously 13 rejected a similar claimed harm in Dominion's 14 2013 IRP proceeding, which is cited in Consumer 15 Counsel's reply. Notably, the Company is free 16 to provide whatever context to the results that 17 it feels are necessary. 18

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In preparing for this hearing, it has come to Staff's attention that the Company disclosed comparable unit-specific and present value retirement results publicly in last year's corrected 2018 IRP proceeding, and that's Case Number PUR-2018-00065. specifically the results of comparable analysis done in 2018 and 2019 can be found in the

1	public rebuttal testimony of Company Witness
2	Glenn Kelly on pages 12 and 13, filed on
3	April 30th, 2019. Staff Witness Abbott will
4	sponsor that document, and we think it's
5	significant that the Company has publicly
6	disclosed comparable information in the past,
7	and wanted to bring it to your attention.
8	In closing, Your Honor, Staff
9	supports Consumer Counsel's motion to make this
10	information public. Thank you. I'll answer
11	any questions you have.
12	JUDGE ROUSSY: I don't have any
13	questions for you, Ms. Macko. Let's go ahead
14	and swear Mr. Abbott in.
15	MS. MACKO: My able co-counsel,
16	Ms. Clowers, is going to direct Mr. Abbott. So
17	I'll turn it over to her.
18	JUDGE ROUSSY: Thank you.
19	GREG ABBOTT, first being duly
20	sworn, testified as follows:
21	DIRECT EXAMINATION
22	BY MS. CLOWERS:
23	Q. Mr. Abbott, could you first state

your name and the position that you hold with the

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Commission?

1	A. Yes, my name is Greg Abbott. And I
2	am a WD director with the Commission's Division of
3	Public Utility Regulation.
4	MS. CLOWERS: And Your Honor, I think
5	first we would like to have the exhibit that
6	Staff circulated earlier today marked for the
7	record.
8	JUDGE ROUSSY: Any objection? Well,
9	let's go ahead and mark it as Exhibit 2.
10	MS. CLOWERS: Thank you, Your Honor.
11	BY MS. CLOWERS:
12	Q. Mr. Abbott, are you familiar with the
13	document that has been marked as Exhibit 2?
14	A. Yes. It's a portion of Glenn Kelly's
15	public rebuttal testimony in the Company's last
16	IRP, PUR-2018-00065. And to be clear, it was in
17	the second hearing on what we call the corrected
18	IRP. I think the Company terms it the compliance
19	filing. In any event, it was another hearing with
20	testimony in that same case number.
21	Q. And can you briefly describe the
22	pages of testimony that Staff has included in this
23	exhibit?
24	A. Yes. It provides a summary of the

Company's 2018 unit retirement and cold storage

analysis.

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- Q. And how does the 2018 publicly provided unit retirement analysis, how does that compare to the information that is the subject of Consumer Counsel's motion in this case?
- Α. Okay. A couple of things I want to say about that. This is very similar information. They typically will do a look-ahead, typically about 10 years. They will use this exact same forecast that they use in the IRP analysis to do a 10-year analysis on units States that they feel are at risk of being uneconomic. And they run that analysis. If it is uneconomic, then they retire the units and will put that into the IRP. Because of all the cold storage -- the units that went into cold storage and the retirements, I think it was around 2,100 megawatts. a big issue in the last IRP case. Staff did discovery in that case to try to find out what the Company had done in its retirement analysis. the second iteration in the corrected IRP hearing Mr. Kelly went ahead and provided the summary results. I believe initially they had it extraordinarily sensitive in that hearing, but in his rebuttal it was in his public testimony, and

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it looks similar to the table we have before us today.

I do want to draw a distinction between the last case and the current case. In the last case we asked for the analysis for the units that the Company had identified for cold storage or potential retirement. We wanted to verify that their analysis supported that. In the current case — and everyone has been focused on the Appalachian Voices set 3-2, but Staff's set was 1-17A, and that was my question. To do a more full analysis, I asked for the analysis for all their coal units so I could compare the ones they were leaving open with the ones they were making the decision to retire. So that's an important distinction between what happened in the last case and this case.

JUDGE ROUSSY: Mr. Abbott, while you're there, had the Company already at the time of this testimony, which is April of 2019, had the Company already announced its plan to put these facilities in cold storage?

THE WITNESS: So I'm going to get to that. I can get to it now, if you want. So my understanding is they announced they were going

into cold storage first. While the units were in cold storage, they sought out bilateral capacity agreements because the units were committed to the capacity market. They were able to obtain some contracts at favorable pricing, and that factored into their decision to go ahead and retire the units. And I believe, as Mr. Gaskill alluded to, they did wait to see if the capacity prices in the next auction were going to be significantly higher, and they weren't. So that's kind of my memory of the sequence of events of how that happened.

JUDGE ROUSSY: Thank you.

what was somewhat surprising to me was of course the Virginia City number. In a 10-year time frame it's almost a half a billion dollars. It's more than all the other units combined by several factors. So that caught my eye as to why that one is not being retired versus support for the ones they are retiring. And that's going to be something we're going to continue to investigate and develop in our testimony -- in Staff's testimony in the IRP case.

The Appalachian Voices kind of piggybacked off my discovery and expanded it to cover all fossil fuel plants plus the biomass plants. So one reason this is important from Staff's viewpoint, if you go to the 2018 IRP case, the Commission had instructions in the first order where they rejected the IRP as filed. And then again when they approved the corrected IRP, and among — they had a lot of instructions, but one of the things the Commission said was in order to do an IRP you had to have a true least cost plan. And they defined that as don't force anything into the model, don't leave any reasonable option out for the model to select.

So the retirement analysis is not handled in the PLEXOS model itself. This is an analysis that the Company does outside of the model. Once they determine that a unit is negative, they will determine the date they're going to retire it, and then they fix that into the model. Now, I don't -- you can quibble about the timing, the exact year that they place it into the model, but I don't have a lot of heartburn with a unit that's negative and

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1	then retiring it in the model. I don't	r T
2	consider that necessarily forcing it in. The	
3	economics shows that it should be retired.	
4	MS. LINK: Your Honor, may I interrupt?	
5	This is going way into substance, and I thought	
6	the purpose of the testimony was to try and	
7	talk about why it should be public versus how	
8	modeling works, what Staff's position is on	
9	retirements, PLEXOS modeling.	
10	JUDGE ROUSSY: Yeah, I was having a	
11	similar thought.	
12	THE WITNESS: I'll cut to the chase.	
13	JUDGE ROUSSY: Yeah, tie this in, or we	
14	need to move on.	
15	THE WITNESS: Okay. I guess in that	
16	vein, Staff is going to be in a position of	
17	perhaps saying the Company did not identify a	
18	true least cost plan, but we can't tell you why	
19	it was extraordinarily sensitive. That's kind	
20	of where we're heading. So I just wanted to	
21	make that point.	
22	JUDGE ROUSSY: You can tell the	
23	Commission why. You can tell people who have	
24	signed the applicable agreement why your	

concern is that you can't include it in your

public testimony unless there is a favorable
ruling; is that accurate?

THE WITNESS: Yeah, I think that that's the sort of thing that raises the question the public would want to know why it's not, you know. Anyway, maybe that's not a concern.

JUDGE ROUSSY: We have a very specific legal standard, and that's what we're going to apply. I can tell you that. But let's move on.

THE WITNESS: Okay.

BY MS. CLOWERS:

- Q. Mr. Abbott, turning back to something you said a few minutes ago, you said that there was a difference between Exhibit 2 and Staff set 1-17, which is one of the pieces that's subject to this motion. And you noted that Exhibit 2 looks at just retirements, as well as 1-17 relates to -- you asked them to run NPVs for all the coal plants. Do you recall saying that earlier?
 - A. Yeah, that's correct.
- Q. In your opinion, does that difference in any way suggest that the units included in 1-17 should be continued -- should be kept extraordinarily sensitive?

1	A. Well, it's not my judgment to make.
2	The Company's market is extraordinary sensitive,
3	and we go through the reasons.
4	Q. And will you be providing some more
5	information here in just a moment as to the
6	reasons why you believe that even though Exhibit 2
7	is just retirement and 1-17 refers to other
8	things, those units in 1-17 should also be public?
9	A. I believe so, yes.
10	MS. CLOWERS: And can we first, Your
11	Honor, can I have Exhibit 2 admitted into the
12	record, please, subject to cross-examination?
13	JUDGE ROUSSY: Any objection? It's
14	admitted.
15	BY MS. CLOWERS:
16	Q. Mr. Abbott, turning first to page 5
17	of the Company's response, Dominion claims that
18	suppliers could use highly positive net present
19	value information for a unit to demand higher
20	prices. Do you have any thoughts on this
21	assertion?
22	A. Yes. And it may be a little
23	duplicative of some of the preceding testimony,
24	but the existing and projected capacity factors

for these units are public information in the IRP.

1	A unit's capacity factor reflects how often it is
2	dispatched into the PJM Energy Market. A unit is
3	dispatched in a given hour if its dispatch costs
4	are lower than the PJM energy price. A high
5	capacity factor for a given unit such as
6	Brunswick, for example indicates that the unit
7	beats the market price most of the time. For
8	example, Appendix 5-D of the IRP shows that
9	Brunswick had a capacity feedback of 69.1 percent
10	in 2019, meaning that its dispatch costs were
11	lower than the PJM energy price about 69 percent
12	of the time. Further, the Company projects that
13	Brunswick will have a relatively high capacity
14	factor through 2035. Hourly PJM energy prices are
15	also public information. Fuel suppliers can
16	easily glean from this public information that
17	Brunswick is, quote, in the money, but there is no
18	evidence that such knowledge is used to demand
19	higher fuel prices. And as was discussed earlier,
20	the highly positive NPV values for highly economic
21	units like Brunswick and Greensville were public
22	information when the Company sought CPCNs for
23	these units. The Company had no concerns that
24	disclosing these highly positive NPVs for these
25	units would show the Company's hand and hamper

their ability to procure the fuel supply for these units at reasonable prices.

Q. Next, Mr. Abbott, Dominion also asserts on page 5 of its response that, quote, "if fuel suppliers see that the NPV for the unit is highly negative, they may seek other buyers for the fuel in anticipation of a unit retirement, which could result in a more expensive alternative fuel source or a lack of fuel source options," end quote.

Do you have any comments on that statement?

A. Yes. Again, existing projected capacity factors are public information, as I stated earlier. Base load and intermediate units with low capacity factors such as VCHEC indicate that the unit is unable to beat the market price most of the time. For example, Appendix 5-D of the IRP shows that VCHEC had a capacity factor of 22.2 percent in 2019, meaning that its dispatch costs were lower than the PJM energy price about 22 percent of the time. More troubling, the Company projects that VCHEC will have a capacity factor of just 5.7 percent in 2020, decreasing to 3.2 percent in 2035. This means that VCHEC is not

competitive with the market, or not expected to be competitive with the market about 94 to 97 percent of the time. Fuel suppliers can easily glean from this public information that VCHEC is not, quote, in the money most of the time, meaning that the unit is at risk of being retired.

Q. And Mr. Abbott, before you go on, I believe earlier counsel for the Company or maybe it was Witness Gaskill noted that some units like <-- THIS PORTION CONTAINS CONFIDENTIAL CONTENT AND HAS BEEN FILED SEPARATELY UNDER SEAL.

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A. Yes, absolutely. So a coal unit -coal units in general are expected to be base load
units. That's how they're designed. They don't
ramp up quickly. They don't ramp down quickly.
They're not good at following load.

A CT, on the other hand, is on demand. Its main source of revenues is through the capacity market, through those capacity revenues for being available very quickly when it's called on, on demand. CT units typically have very low capital costs, but relatively high dispatch costs. So they only dispatch in the

1	hours where they beat the energy price, are lower
2	than the PJM energy price, which are typically
3	going to be during your peaking hours.
4	< THIS PORTION CONTAINS CONFIDENTIAL CONTENT AND
5	HAS BEEN FILED SEPARATELY UNDER SEAL.
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9	> The
10	economics are different, the operating
11	characteristics are different. CTs are not
12	expected to run at high capacity factors.
13	< THIS PORTION CONTAINS CONFIDENTIAL CONTENT AND
14	HAS BEEN FILED SEPARATELY UNDER SEAL.
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22	> It's mostly paid off, so that's
23	another thing to keep in mind with that one. But
24	yeah, I kind of agree with Mr. Norwood. < THIS PORTION CONTAINS CONFIDENTIAL CONTENT AND HAS
25	BEEN FILED SEPARATELY UNDER SEAL>

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The market participants are well aware of VCHEC.

- Q. And again, on page 5 of its response the Company --
 - A. If I could continue on a little bit?
 - Q. I'd just like to set that up for you.
 - A. Okay. Well, go ahead.

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- Q. I was going to say on page 5, like I quoted earlier, the Company expressed a potential concern about there being a lack of fuel source options. Do you have any comments on that point when you make public a highly negative NPV?
- A. Yes. And the main point -- of course, Mr. Workman spent a lot of time talking about biomass, but I would like to point out that VCHEC burns what's known as gob coal. It was specifically designed to burn gob coal. To Staff's knowledge, it is the only coal unit in the country that burns gob coal. It is unclear to Staff what other buyers are available for this fuel. If anything, the threat of retirement, or having a high negative NPV, should cause sellers of gob coal to lower their prices.
- Q. And also on page 5 of its response

 Dominion states that publicly disclosing the

 market sensitive NPV information could inform the

market of the Company's potential bidding strategy for various units. Do you have any comments on this assertion?

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A. Yes. Appendix 4-O of the Company's public version of its IRP contains various forecasts which are used in the Company's IRP modeling, and these exact same forecasts are relied upon by the Company to perform its unit retirement study.

The Company's consultant, ICF, performed forecasts of natural gas prices, coal prices, oil prices, on-peak power prices, off-peak power prices, renewable energy certificate prices, and most importantly here, PJM/RTO capacity prices. This is exactly the information that could inform other market participants of the Company's potential bidding strategy for any given unit. It would be difficult, if not impossible, to discern any of this market sensitive data from the NPV information contained in the retirement analysis -- I should expand that -- the NPV results page of the retirement analysis; however, it appears that the Company has already publicly disclosed this information in its IRP while it simultaneously argues that the ES NPV information

should not be disclosed because it would provide similar information to the market.

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And the other point -- and Ms. Macko discussed this with Mr. Gaskill, but I just wanted to hit this point again. And Your Honor, you asked about the NPVs of comparing a 35-year to a 10-year and what difference that makes. And NPV is -- first of all, I don't think most workers or biomass workers really know what NPV is. You've got to either be doing cost benefit analysis or be doing this kind of analytical work for most people to understand what it is. But all it is is just taking a stream of costs and bringing it back to a common point in time. And you can look at three years. You can look at five years. You can look at 10 years. The Company for its retirement analysis looks at 10 years. That's not necessarily an unreasonable amount of time. of these units are typically getting near the end of their book life anyway. So that's one of the reasons you would look at maybe a shorter period for a retirement analysis and a longer period for a brand new plant.

With that being said, this is a 10-year NPV result. The Company is talking about

1 making bids into a capacity market that at most 2 goes three years into the future. So I'm not sure 3 what you can get from a 10-year analysis. 4 don't get any specific information about the cost 5 associated with any given year, because they're 6 all rolled up into a 10-year NPV analysis. 7 being said, though, all the forecasts, you can 8 pick those up year by year in the Company's 9 Appendix 4-0. So that information is out there, 10 and I believe Mr. Norwood made that point as well. 11 You know, maybe Ms. Link is going to ask me did I 12 try to independently do the NPVs. No, I did not, 13 but there is information out there where 14 sophisticated market participants, if they wanted 15 to, could get an idea of what Dominion thinks of 16 the market. So I agree with Mr. Norwood on that 17 point.

Q. Dominion also expresses concerns in its response I believe on page 6 that requiring the public disclosure of unit-specific NPVs, particularly negative NPVs, could lead market participants to assume that the Company will retire specific units and then exploit that market intelligence, such as by driving up the price of bilateral capacity purchases. Do you have any

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comments on this?

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Yes. And let me start off, PJM recently -- who knows what's going to happen in the future; the markets are kind of in limbo -but in recent years they have had excess capacity has been what's been experienced in the PJM RTO. It's important to make a distinction with Dominion they are a vertically-integrated utility, so -and as such, they both are buyers of capacity out 10 of that auction, and they also are sellers of 11 capacity of their company-owned units into the 12 auction. They purchase all the capacity they're 13 required through the auction based on the total 14 amount that clears the auction, and they pay it at 15 the auction clearing price; however, because they 16 also are bidding units into the auction, to the extent they've bid a unit into the auction and 17 18 they're committed to provide that capacity, should 19 they determine to retire that unit, they would 20 have to replace that capacity. I think that's 21 where a bilateral -- short-term bilateral 22 agreement would come into play. You wouldn't do a 23 20-year agreement or anything like that. 24 kinds of agreements are meant to bridge those 25 kinds of gaps.

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And as I spoke earlier, the Company was able to do that with the cold storage unit.

People might not understand what NPV means, other than utility analysts, but putting units in cold reserve is a pretty strong indication that the Company is planning to retire it. And they were able to go out and procure bilateral capacity agreements. Now, granted, that was at a time where there was excess capacity in the market, but I just don't see any evidence that that -- they were not able to do that.

- Q. Mr. Abbott, were you present when counsel for the Company and Mr. Gaskill noted that the Company would be -- would agree to make the net present value information for Chesterfield Units 5 and 6 and Yorktown 3 public because the retirement decision for those plants has already been finalized?
 - A. Yes.

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Q. And were you present when the Company expressed concerns with publicly releasing the NPV information for any of the other plants or any of the other units given that those retirements had not been finalized, and that there was a potential impact to workers at those units' localities that

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rely on tax revenues, and I believe there may be some other reasons provided?

- A. Yes, I heard all that testimony.
- Q. Has the Company publicly provided potential, but not guaranteed, retirement dates for units other than Chesterfield 5 and 6 and Yorktown 3 in Appendix 5-J?
- A. Yes; and to a certain extent, a lot of these dates kind of coincide with what's in the law. Obviously, the law does not name specific units, but it's written in such a way that --
 - Q. Do you mean VCEA?
- A. Yeah, the Virginia Clean Economy Act. And, for example, the biomass units are shown to be retired in 2028, which would be consistent with the VCEA. Chesterfield 5 and 6 I think are actually retiring a year earlier than what you might expect looking at the law. Clover retires -- so those are in the law and they're also modeled by the Company. I recognize they noted the disclaimer they haven't made a hard decision, which I guess means they haven't actually sent deactivation requests for those units to PJM yet, but I think someone from the public looking at this document would probably --

- 1 a worker at Clover, for example, probably would 2 take them at their word that they're planning to 3 retire that unit. It's right there in their plan. So I'm not sure that they would see the 4 5 disclaimer. This is a big document, but that 6 retirement date is in a number of places in the 7 plan itself, and including I think Appendix 5-J, I believe. 8 9 Ο. Yes.
 - A. There's a list of them.
 - Q. Yes, they're listed in 5-J. And are some of the units for which there is a potential retirement date, but no final decision is made, do some of those units overlap with the units included in Staff set 1-17 and ER set 3-2, which are the subject of this motion?
 - A. Yes.

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- Q. Mr. Abbott, do you have any other
 comments on anything Company Witness Workman said
 earlier today?
 - A. I believe it's been fairly well covered. So I'm not going to double up again.
 - Q. Do you have any comments -- or any other comments on anything that Company Witness Gaskill stated today on the stand?

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A. So maybe just one thing. And this kind of ties into what you were just asking me about, which goes to the Company's concern that communities and workers at plants might become aware and be overly concerned about retirement decisions when, in fact, maybe the Company is not planning to retire the unit. And, of course, Staff shares the concerns of the workers and the citizens of Virginia and the ratepayers as well, I might add.

As far as I know, the Company has never engaged Chmura Economics like they will when they want to build something to analyze those impacts or to discern -- to help inform their retirement decision on which one would be the best one. I think that's just a general concern or a general awareness that they've stated.

But I would point this out: If you just look at VCHEC, which shows a net loss over the 10 years of \$472 billion; Clover, which is a cost of \$21 billion. And I believe Mr. Norwood called that noise in the modeling. I would tend to agree with that. You can change one assumption a little bit and perhaps move that number positive. And actually you see that in one of the

million. I don't have the interrogatory response in front of me, but roughly about 100 people more or less work in each of these plants. So if you compare Clover to Virginia City, in the one case the ratepayers are out of pocket almost a half a billion dollars for 100 jobs, but the Company doesn't have any problem with the Clover plant's 100 jobs more or less being retired and going away. But that one comes at a cost to ratepayers of \$21 million. So it's just a high-level point I would like to make.

JUDGE ROUSSY: Mr. Abbott, isn't one of those plants identified in the VCEA and one is not?

THE WITNESS: That's correct. But again, in order to do our IRP analysis, we have to look at the least cost plan because we have been tasked with coming up with the cost of compliance with the Clean Economy Act. So, you know, so in that -- and that's plan A. So in plan A there are no hard-and-fast dates that any unit should retire, other than the economics of the unit.

Then when you go to looking at the

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other plants, B through D, those are the plants the Company has put forward that would comply with the law, and there's probably more than one way within the four corners of that law to comply with it. But those plants all have the retirements that are mentioned in the law as you said.

JUDGE ROUSSY: I think you had talked about what the Company cares about or not. What does it matter what the Company cares if there's a statute that says you must retire a plant by X date, isn't that assumption just being carried through into the modeling? What am I missing?

THE WITNESS: Well, that's fair enough. Well, again, in IRP space we always look at the least cost plan, and that's what I'm trying to drill down to. But you're correct, if they're going to retire anyways, then what difference does it make? Those jobs are gone anyway. So your point is well taken.

JUDGE ROUSSY: It might not be a choice, right?

THE WITNESS: Well, you know, there's lots of twists and turns in that law. I think

they could petition the Commission if they thought the units were needed for system reliability to postpone those retirements. I'm not saying the Company will do that. They're certainly not modeling that they're going to do that. It's like anything in that law, there are ways to do things if there's a reliability issue perhaps, but that's not -- doesn't come into play in the least cost plan. That should be strictly economic driven, trying to develop the least cost based on the economics of all these units.

MS. CLOWERS: Nothing further, Your Honor. Mr. Abbott is available for cross-examination.

JUDGE ROUSSY: All right. Mr. Browder, any questions?

MR. BROWDER: Yes, Your Honor.

CROSS-EXAMINATION

BY MR. BROWDER:

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Q. Mr. Abbott, can you tell me -- this is with respect to the discussions around capacity, procuring capacity. What's the total capacity in PJM market; do you know?

A. I don't know offhand.

1	Q. Approximately?	4
2	A. I'm sorry, what?	Act h
3	Q. The approximate total capacity in the	
4	PJM market, 200,000 megawatts; does that sound	
5	right?	
6	A. I would take that subject to check.	
7	I'm not the person on staff that tracks the PJM	
8	market as my full-time job, but it's a big market.	
9	MR. BROWDER: That's all I have,	
10	Mr. Abbott. Thank you.	
11	JUDGE ROUSSY: Ms. Link?	
12	MS. LINK: Yes, Your Honor, just	
13	briefly.	
14	CROSS-EXAMINATION	i
15	BY MS. LINK:	
16	Q. Good afternoon, Mr. Abbott.	1
17	A. Good afternoon.	
18	Q. I just want you I want to just	
19	clarify a response or a question the hearing	
20	examiner asked you about the information that is	
21	set forth in Exhibit 2?	
22	A. So Exhibit 2 is and I don't have	
23	numbers on mine. Is that one of the	
24	interrogatories one of the NPV results pages?	
25	Q. It's the second rebuttal of	

1	Mr. Kelly.
2	A. Oh, Mr. Kelly, gotcha. I'm there.
3	Q. I believe the examiner was asking
4	whether the information is shared publicly after
5	the decision to retire the units was made; do you
6	recall that question?
7	A. Yes. And it was because the
8	announcement came I believe it came out the
9	Company filed its testimony in the corrected IRP,
10	and then the Company, I think even before Staff
11	filed testimony, made that announcement on the
12	retirements, which of course we then addressed in
13	our testimony, and then Mr. Kelly's rebuttal
14	testimony was responding to Staff's testimony.
15	Q. So by the time the information on the
16	NPVs that is Exhibit 2, by the time that came out,
17	the decision to retire was already made, correct?
18	A. That's correct.
19	MS. LINK: Thank you. I have no further
20	questions, Your Honor.
21	JUDGE ROUSSY: All right. Thank you.
22	Any redirect?
23	MS. CLOWERS: No, Your Honor.
24	JUDGE ROUSSY: Thank you for your

testimony, Mr. Abbott. You may be excused.

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1 Mr. Browder, any reply by argument 2 or testimony? 3 MR. BROWDER: Yes, Your Honor. 4 brief. I know it's been a long day. We've 5 probably gone over time from what you-all 6 budgeted. I'll be brief. 7 There has been a lot of argument 8 and some evidence on alleged competitive harms 9 to the Company in the context of fuel suppliers 10 bidding into the capacity markets. I've got 11 very little to add on that. There's been a lot 12 I think Your Honor has captured what's said. 1.3 been said. 14 Just following up briefly with what 15 I just asked Mr. Abbott with respect to 16 capacity market. PJM is 197,000, I think, 17 market capacity. One of the facilities that is 18 getting a lot of attention on these net present 19 value results, the VCHEC facility, is about 20 600-some megawatts, infinitesimal fraction of 21 the PJM market. So I think the concerns 22 expressed around that are really just not 23 persuasive. 24 I really want to turn to what 25 Company counsel said was the heart of their

1	argument, and that is this messaging the
2	concern they have with messaging to communities
3	and apparently even the Company's own
4	employees. The Company is concerned about, it
5	appears, disclosing information publicly that
6	its own employees would learn about. You know,
7	the Company stated it would cause disruption if
8	that information becomes public, and that it
9	would be a problem if it's not without the
10	proper explanation and context. Well,
11	that's surely the Company has the capability
12	with all of its personnel and lobbyists and PR
13	folks to attempt to control any messaging that
14	it wishes to. So that's really not should
15	be irrelevant. You know, what possible harm
16	can there be in being honest with the
17	communities in which the Company operates, and
18	being honest with them about the viability of
19	facilities in those communities, good or bad,
20	weak or strong? You know, the Commission has
21	already stated the importance of the public
22	being made aware about the type of information
23	like this in IRP proceedings.
24	Again, in view of the hour, I won't
25	belabor all the other arguments. I would like

1	to close with this: This argument of sort of,
2	you know, it's not so much financial harm or
3	competitive harm to the Company; it's harm to
4	third parties and the communities and it's
5	going to create disruption, that's been
6	addressed before in confidentiality issues.
7	And I would just cite for you here in closing
8	the 2014 Rider U proceeding, PUE-2014-00089 in
9	a ruling dated February 20th, 2015 from the
10	hearing examiner, which stated, "The potential
11	for communication difficulties resulting from
12	unrealized expectations does not rise to the
13	level of harm outweighing the presumption of
14	public disclosure." I think that's really
15	what we've been going on now for three
16	hours, but I think that's what this is all
17	about. You know, we don't have any hidden
18	agenda or anything in this, but we just again
19	feel like so much information that has the
20	confidential ES designation slapped on it, a
21	lot of it we question, you know, amongst
22	ourselves, but we don't take the time to file
23	pleadings and to, you know, tie up all the
24	parties here in these types of hearings on
25	that. We let a lot of it go. But we looked at

1	this and just felt like, you know, this is
2	really something there's no good reason for
3	it to be confidential. This is the type of
4	information that the Commission has indicated
5	that should be made public, and that's why we
6	filed our motion. We believe strongly that the
7	pleadings already filed bear all this out.
8	Nothing has come out of this hearing today, we
9	believe, that should cause Your Honor to find
10	that the Company has carried its burden.
11	And again, we ask that you enter a
12	ruling designating that these two pages of
13	10-year net present value results be
14	declassified and be public in this IRP
15	proceeding. With that, I'll conclude, Your
16	Honor.
17	JUDGE ROUSSY: All right. Thank you,
18	Mr. Browder. With that, I'm assuming you do
19	not plan for Mr. Norwood to provide any further
20	testimony?
21	MR. BROWDER: That's correct, Your
22	Honor. Again, we'd like to wrap this up for
23	all parties involved, and don't feel the need
24	to have rebuttal testimony.
25	JUDGE ROUSSY: Okay. Thank you.

1 Ms. Blair, I don't know that we have looked 2 into this before, but is it too late to request 3 an expedited transcript? 4 (Off the record discussion). 5 JUDGE ROUSSY: As we discussed earlier, 6 Ms. Link had the more efficient idea for 7 everyone to take a look at the transcript so we 8 can work through what needs to be redacted. 9 I'll think a little bit through that as far as 1.0 whether we would do that exercise before or after my ruling and I'll circle back with 11 12 everyone before any sort of transcript is 13 published. So I don't know whether -- I don't 14 know the timing of it, but I do know we'll have 15 that review before anything gets published. 16 MS. LINK: Thank you, Your Honor. 17 JUDGE ROUSSY: Is there anything further 18 to come before the Commission? 19 MR. BROWDER: Nothing further from 20 Consumer Counsel. We again thank you for your 21 time on this. 22 MS. LINK: No, Your Honor. Thank you. 23 JUDGE ROUSSY: Thank you all. Everyone 24 have a good day. The Commission is adjourned.

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      (Off the record, 5:37 p.m.)
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CERTIFICATE OF REPORTER

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I, Lisa M. Blair, RMR, CRR, do hereby certify that the proceedings were heard before me in the State Corporation Commission hearing herein; further that the foregoing is a true and accurate record of the testimony and other incidents of the hearing herein; and that I am neither counsel for, related to, nor employed by any of the parties to this case and have no interest, financial or otherwise, in its outcome.

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WITNESS WHEREOF, I have hereunto set my hand and affixed my notarial seal this 24th day of August 2020.

My commission expires October 31, 2020.

Lisa Blair, RMR, CRR